

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**BOARD ORDER NO. R6V-2013-(TENTATIVE)
WDID No. 6B360109001**

RESCISSION OF CEASE AND DESIST ORDER NO. R6V-2008-0005

for

**VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY
REGIONAL WASTEWATER TREATMENT PLANT**

_____ San Bernardino County _____

The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Reason for Action

The Victor Valley Wastewater Reclamation Authority, hereafter referred to as "Discharger", has been under Cease and Desist Order (CDO) No. R6V-2008-0005, adopted on February 14, 2008. The CDO was adopted because the Discharger's Regional Wastewater Treatment Plant (WWTP) was not designed to remove nitrogen and could not meet final nitrogen effluent limitations establish in the Discharger's National Pollutant Discharge Elimination System (NPDES) Permit No. R6V-2008-0004 for surface water discharges to the Mojave River. Additionally, the CDO required actions to address nitrate groundwater pollution had occurred from past discharges to onsite percolation ponds. The CDO established:

- Interim nitrogen effluent limitations that the WWTP could achieve,
- Compliance milestones for the Discharger to complete WWTP upgrades to achieve the final nitrogen effluent limitations,
- Groundwater investigation and remediation requirements, and
- Periodic reporting requirements.

The Discharger has completed WWTP improvements and has demonstrated compliance with the final effluent limitations stated in NPDES permit R6V-2008-0004 and the remaining requirements of CDO R6V-2008-0005. Because the Discharger has reduced effluent nitrogen concentrations to achieve final effluent limitations and demonstrated that conditions of groundwater nitrate pollution are no longer present, CDO R6V-2008-0005 is no longer needed and should be rescinded for the reasons stated below.

2. Discharger and Facility

The Discharger is a joint powers agency comprised of the City of Victorville, City of Hesperia, Town of Apple Valley and San Bernardino County (for County Services Areas No's. 42 – Oro Grande and 64 – Spring Valley Lake). The Discharger provides

wastewater treatment for the Victor Valley communities. The Discharger's service area is located in the upper Mojave Desert and encompasses about 216 square miles with a population of approximately 284,377.

The WWTP has a flow treatment capacity of 18.0 million gallons per day (mgd) but has an authorized discharge flow of 14 mgd. The treatment system consists of headworks, primary clarifiers, flow equalization, aeration basins, secondary clarifiers, coagulation/flocculation, filtration, and ultra-violet disinfection. Improvements in aeration processes increased dissolved oxygen, improving nitrification, and the addition of internal recycling increased denitrification. In 2009, the Discharger completed improvements to the WWTP treatment process by eliminating inefficiencies in the aeration basins, improving the nitrification de-nitrification process, thereby oxidizing the ammonia in the effluent into nitrates and conversion and release as nitrogen gas.

The Discharger disposes of treated effluent from the WWTP in three separate locations. Tertiary treated wastewater is discharged to the Mojave River. Secondary treated wastewater is discharged to percolation ponds. A portion of the tertiary treated wastewater is used for recycled water purposes at the City of Victorville's Westwinds Golf Course.

3. Regulatory Permits Issued to the Discharger

Discharges from the WWTP are regulated by the Regional Board under both Waste Discharge Requirements (WDRs) and a NPDES Permit. Discharges to the Mojave River are regulated by NPDES Permit No. R6V-2008-0004 (NPDES No CA0102822), which is identified in the permit as Discharge Point No. 001. Discharges to the percolation ponds are regulated by WDRs R6V-2012-0058. Discharges of recycled treated water are regulated by R6V-2003-0028, as amended by Orders R6V-2003-0028A1 and R6V-2003-0028A2.

Percolation pond discharges were previously regulated by Order No. 6-99-58. The Lahontan Water Board adopted Board Order No. R6V-2012-0058, on November 14, 2012, revising and updating requirements for percolation pond discharges from existing ponds and authorizing discharges into new percolation ponds. That Order establishes time schedules to install liners and eliminate seepages from the biosolids lagoons that were contributing excess nitrogen to groundwater

4. Water Quality Compliance Problems Requiring Issuance of CDO R6V-2008-005

In 2008, groundwater monitoring data indicated the discharge of treated sewage to percolation ponds at the WWTP had caused nitrate-nitrogen concentrations in groundwater to exceed a water quality objective in the Water Quality Control Plan for the Lahontan Region (Basin Plan). The receiving groundwater objective for nitrate-nitrogen is the primary maximum contaminant level for drinking water; 10 mg/L nitrate plus nitrite (sum as nitrogen). Because the receiving Mojave River and underlying groundwater has a Municipal (MUN) designated beneficial use, receiving water quality objectives at the WWTP include meeting the drinking water standards established in title 22, California

Code of Regulations. The Lahontan Water Board issued CDO R6V-2008-0005 to require the Discharger to take interim steps to prevent pollution of groundwater from the discharge of treated effluent to the percolation ponds.

5. Compliance Evaluation

The Discharger is in compliance with the terms of Cease and Desist Order No. R6V-2008-0005 Technical and Monitoring Report Requirements required in Permit No. R6V-2008-0004 as described below.

Plant Upgrades - The Discharger has completed the nitrification/de-nitrification plant-wide improvements that included upgrades to the aeration process equipment such as upgrading the existing diffusers, installing new recycled pumps, adding new state of the art dissolved oxygen probes at strategic locations in the aeration basins to monitor the adequacy of oxygen content within the aeration basins, and repairing system leaks to improve process efficiencies. These improvements yielded an improved nitrification/de-nitrification process within the aeration basins, thereby improving the oxidizing of ammonia into nitrate.

Attaining Final Effluent Limitations - The compliance milestone schedule to attain final compliance with effluent limitations prescribed in section IV.A.1.a of Board Order No. R6V-2008-0004 were met.

Eliminating Conditions of Groundwater Pollution - The Discharger submitted Groundwater Investigation reports recommending groundwater quality be evaluated to assess changes resulting from treatment plant upgrades. The annual average nitrate concentrations from groundwater sampling have been below the primary MCL of 10 mg/L in almost every groundwater well for every year since facility upgrades were completed in 2009. The 2012 groundwater monitoring well data indicate nitrate concentrations are below the applicable water quality objective for nitrate of 10 mg/L, and therefore groundwater pollution no longer exists beneath the WWTP.

Therefore, the Discharger has completed the necessary projects and actions to terminate violations and threatened violations to the Waste Discharge Requirements to the extent that nitrogen limitations are no longer exceeded in effluent and receiving groundwater. The following table summarizes compliance with the Cease and Desist Order No. R6V-2008-0005 requirements.

CDO R6V-2008-005 Compliance Evaluation Table

Section	Requirement	Date Due	Attainment Date	Evaluation
I.A.	Attain Interim Average Monthly Effluent Limitations <ul style="list-style-type: none"> Ammonia-N = 3.1 mg/L Nitrate-N = 11.2 mg/L 	Upon CDO Adoption	Upon CDO Adoption	Met as reported in all status reports submitted through January 31, 2012.
I.B.	Discharge no more than 98 lbs total nitrogen per million gallons discharged per 12-month period.	Upon CDO Adoption	Upon CDO Adoption	Met as reported in all status reports submitted through January 31, 2012.
II.	Implement a Pollution Prevention Plan	07/30/2008	04/01/2008	Implementation was attained prior to the due date.
III.	Start construction of Nitrification/De-nitrification facility improvements	10/01/2009	04/26/2006	Improvements began prior to the due date.
III.	Complete construction	March 31, 2013	Oct 2012	The Discharger replaced the Aqua Diamond Filter with an upgraded Traveling Bridge Filter and improved helical skimmers on primary clarifiers.
III.	Attain Final Average Monthly Effluent Limitations of Permit No. R6V-2008-004 <ul style="list-style-type: none"> Ammonia-N = 0.8 mg/L Nitrate-N = 8.2 mg/L 	01/31/2013	04/01/2008	Status reports indicate that this requirement was met.
IV.A.	Submit Pollution Prevention Plan	07/01/2008	07/01/2008	Plan submitted by the due date.
IV.B.	Submit Quarterly Project Progress Reports	Quarterly - Beginning May 1, 2008 and continuing until achieving compliance	First Report - April 2008 Last Report - January 30, 2012	Timely quarterly reports were submitted.
IV.B.5	Status reports to include flow and effluent nitrogen data	Annually - Beginning August 1, 2009	In all reports from 2009 - 2012	Status reports indicate that this requirement was met.
IV.C.	Submit Groundwater Investigation Work Plan	07/28/2009	07/28/2009	Plan was submitted by due date.
IV.D.	Groundwater Investigation Project	08/28/2009	03/31/2010	Discharger proposed, and Water Board staff accepted, long-term monitoring to evaluate groundwater improvements resulting from WWTP upgrades.
IV.E.	Submit groundwater nitrate Remediation Plan	02/15/2010	03/31/2010	Discharger proposed, and Water Board staff accepted, long-term monitoring to evaluate groundwater improvements resulting from WWTP upgrades.
IV.F.	Submit a Pollution Prevention Plan Implementation Report	02/01/2009	02/01/2009	Plan was submitted by due date.

6. California Environmental Quality Act

This action is being taken by this regulatory agency to rescind the Cease and Desist Orders, pursuant to the California Water Code and as such is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), in accordance with title 14, California Code of Regulations, section 15321(a)(2).

7. Public Notification

The Water Board has notified the Discharger and interested parties of its intent to rescind the Cease and Desist Orders. The Water Board, in a public meeting, heard and considered all comments pertaining to this Board Order.

IT IS HEREBY ORDERED THAT:

Cease and Desist Order No. R6V-2008-0005 is hereby rescinded.

I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on June 19, 2013.

PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

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